HANDBOOK

OF THE

MEDICAL SERVICES

OF

FOREIGN ARMIES.

PART VI.-THE NETHERLANDS AND BELGIUM.

1911,



LONDON:

S MAJESTY'S STATIONERY OFFICE, for directly or through any Bookseller, from JONS, LTD., Fatter LANE, E.C.; or YD, TWEEDDALE COURT, EDINBURGH; or LTD. HE GLASTON, STREET, DURLING.

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INTRODUCTION.

In 1902 a "Handbook of the Medical Organizations (Chiefly for War) of Foreign Armies," by Lieut.-Colonel Frank Howard, Army Medical Staff (Retired Pay), was published officially. It contained a short account of the field medical units and some other details of the army medical service of twenty different States, and has been used as one of the text books for the examination of officers of the Royal Army Medical Corps qualifying for promotion to Lieutenant-Colonel.

In consequence of the Geneva Convention of 6th July, 1906, a knowledge of these services has become of greater importance than previously to officers of the army, more especially to officers of the Royal Army Medical Corps, and to all who may be associated with that corps in time of war. It has been found advisable therefore to alter the character of the handbook considerably in order to present a wider and more general view of the military medical services of other countries.

The plan has been adopted of preparing accounts of the more important of these services and publishing them in separate parts as each is completed. This will not only facilitate revision as changes occur in the future, but will place the parts in the hands of officers with less delay than if the plan were followed of issuing a complete revision of Colonel Howard's handbook in one volume.

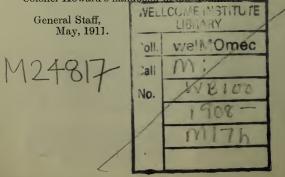


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THE MEDICAL SERVICE OF THE ARMY OF THE NETHERLANDS.

CHAPTER I.

HISTORY.

In spite of the constant wars in which the Dutch Republic was engaged there was no regular army medical service up to the year 1673, when an ordinance was published (Ordonatic aangaande de Geneeskundige dienst by de legers van den Staat in de jare, 1673), which sanctioned a military surgeon for every two companies and six surgeons for every regiment, as also a certain number of apothecaries for the army. The appointments were, however, only made for war, and on the conclusion of peace the medical establishment was disbanded.

In 1795 a "Bureau van Gezondheid" was formed at the Hague and Professor Dr. Brugmans, one of the State councillors, was appointed its chief. This bureau, which was composed of eminent medical men, conducted examinations of medical students, and nominated successful candidates for commissions in the army medical service. During the French occupation of the Netherlands, Napoleon appointed Brugmans to be 7th Inspector-

General of France.

Brugmans, who was rector of the University of Leyden, and inspector-general of the Dutch army medical service, was one of the most capable men of his time. Under his directions, excellent medical arrangements were made for

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the Dutch troops in the field. In June, 1815, every corps had pack horses, carrying surgical material for first-aid dressings, and every division had mobile field hospitals. Stationary hospitals were established at Nivelles, Brussels and Louvain, and others were prepared further back, so that when fighting began there were nearly 6,000 beds ready for the reception of wounded and another 2,000 could be got ready at short notice.

Immediately after the battle of Waterloo, Brugmans was sent to Brussels to arrange for the care of the thousands of wounded who had been brought to that city. All the military hospitals were overcrowded with wounded, as also ten churches and all the public buildings, in addition to which many of the inhabitants had received

wounded into their own homes.

Fearing the occurrence of some epidemic, in consequence of this sudden influx of wounded, for whose accommodation proper arrangements had not been made, Brugmans instituted the following measures:—

- 1. Increase of medical staff.—The services of all available medical officers, both civil and military, in Brussels, were enlisted, but were found to be quite inadequate for the care of so many wounded. All surgeons from the neighbouring towns and villages were therefore required to proceed to Brussels, where they were formed into a paid corps, and placed under the director of Surgeon-Major Kluyskens; the medical students of Brussels and Ghent were likewise called on to assist by acting as dressers to the surgeons.
- 2. Provision of hospital accommodation.—The pursuing armies had requisitioned all means of transport in consequence of which the wounded could not be distributed to other towns and had to be accommodated somehow in Brussels. Brugmans first of all had a large portion of the courtyard at the back of the military hospital covered in with tarpaulins, sheets, &c., so as to form an airy shelter. All patients, whose wounds had become offensive, were placed in this covered-in court. Wooden huts capable of accommodating 2,500 patients were erected on the glacis of the city. The total number of patients admitted into the various hospitals was roughly 9,000, and some 250 amputations were performed in the first few days.

3. The care of patients in private houses.—In order to ensure that the wounded, who had been received into their own homes by the inhabitants, should be properly attended to Brugmans divided the city into eight districts and appointed a surgeon to each, whose duty it was to visit all the patients daily. This arrangement was publicly notified, and the people were at the same time directed to place a card in one of the lower windows of the house, showing in plain figures the number of patients in the house. During the first few days after the battle some 4,000 patients were in this way treated in private dwellings.

4. The provision of surgical material.—The supply of dressings in Brussels was speedily exhausted, but ample quantities were obtained from other places in the country.

5. The distribution of wounded to other parts of the country.—In order to lessen the dangers likely to arise from the presence of such a large number of wounded, crowded together in one city, Brugmans caused hospitals to be fitted up in the public buildings at Louvain and in other cities. Between June 16 and July 15 some 10,000 wounded Prussians were transferred to the hospitals at the former place, while many more were sent back to Germany. The British Government also removed large numbers of its wounded as well as wounded prisoners of war, by sea, to England.

6. Measures for clearing the battle-field and collecting the wounded from the neighbouring villages.—Under Brugmans' instructions the mayors of the districts surrounding the battle-field called on the inhabitants to furnish working parties for the burial of the dead; this

sad duty was most carefully carried out.

A party of surgeons was told off to visit the villages of Waterloo, Nivelles, Braine l'Alleud, Genappes, Fleurus, Chatelet, Charleroy, Gosselies, Fontaine l'Évêque and the smaller hamlets in which many wounded had been received by the inhabitants. The surgeons were supplied with carriages, in order to enable them to travel quickly from point to point of the area. Their instructions were to afford such professional assistance as the patients stood in need of, but more particularly to make arrangements for the early removal of the wounded to the hospitals in

Brussels. In Nivelles, Charleroy and some other places, temporary hospitals were erected to accommodate the severely wounded, who were unfit for removal to Brussels; a few of them were admitted into the civil hospitals of the district.

7. General precautions. — Scrupulous cleanliness was enjoined, not only in the hospitals, but also in all private dwellings in which any wounded were accommodated. Special stress was laid on the immediate removal of every article likely to give rise to foul odours and frequent fumigation of the rooms was advised.

The wisdom of Brugmans' measures was shown by the relatively low mortality among the wounded and by the

absence of any epidemic in the city.

In 1815 Brugmans instituted special courses of instruction for military surgeons, the teachers being specially selected army medical officers. The classes were first held in Leyden; two years later other classes were formed in Louvain for medical officers serving in the southern part of the country. In 1822 both were transferred to Utrecht, where an army medical school, with a full medical curriculum, was established for the training of military surgeons. The military medical school of Utrecht was most successful; several of the best known professors of the universities of Holland were trained in this school and began their career as army surgeons. The army also benefited by having a highly trained and efficient staff of medical officers, whose reputation was well known in Europe.

The troubles of 1830 lead to the closing of the school for two years, and considerably interfered with its work up till the year 1835. In 1841 its constitution was remodelled. In 1865 a general desire for uniformity in medical training and professional status made itself felt. A law was consequently passed, which made it compulsory for all persons wishing to practise medicine to pass the examination and obtain the diploma of "Arts." As the army medical school did not give instruction or hold examinations in certain branches of medicine, such as midwifery and gynæcology, certain changes in its curriculum became necessary. In 1868 it was transferred to Amsterdam. The students attended the university

lectures there, and in addition five army medical officers and one apothecary were appointed to lecture on technical subjects. This school has now been abolished.

CHAPTER II.

THE MEDICAL SERVICE IN TIME OF PEACE.

GENERAL MILITARY ORGANIZATION.

Every male subject of the Netherlands on attaining the age of 19 years becomes liable for service in the national forces. In certain cases exceptions are allowed, e.g., if resident in the Dutch colonies, or if one brother is serving in the army. The annual contingent is fixed by law at 17,500, of which number 600 are allotted to the navy. Recruits for the annual contingent are selected by ballot and no substitutes are permitted. The period of service is eight years with the active army, and seven years in the landweer.

The period of training with the colours is for the mounted troops 18 months, for the dismounted 8½ months. About half the recruits in the dismounted branches are only required to serve four months, provided that they have passed certain educational tests, and have undergone the prescribed preliminary training before joining. After completing the first period of training the men are sent on furlough, but are called up every second year for a period of four weeks' training with the colours.

In addition to the annual contingent there are volunteers. These are youths of not less than 16 years of age, who volunteer for service in the army or navy. They engage to serve for 10 years, three of which are passed with the colours in the mounted branches and engineers, two years in the other arms; the remainder of their service is passed in the reserve. Service with the colours

may, however, be extended for successive periods, subject to certain conditions. The non-commissioned officers of the army are mostly obtained from among these volunteers.

COLONIAL ARMY.

The army of the Netherlands East Indies is purely colonial and is composed of natives and Europeans. No portion of the home army is sent on colonial service, but individual soldiers are at liberty to enlist in the East Indian army. European and native soldiers serve in separate companies, but these may be grouped together to form a battalion. The total strength in officers and men is some 36,000.

MEDICAL SERVICE OF THE NATIONAL MILITIA.

Personnel.

The army medical service consists of: -

(1) Army medical officers.(2) Military pharmacists.

(3) Administrators of hospitals.

(3) Administrators of hospitals.(4) Military veterinary officers.

(5) Four companies of hospital troops.

(6) Hospital orderlies.

Medical officers.

Title. Rank. Number. Inspecteur van den Geneeskundigen Dienst der Landmacht Major-General 1 Dirigeerend officier van Gezondheid
Dienst der Landmacht Major-General 1
1te Klasse Colonel 3 Dirigeerend officier van Gezondheid
2de Klasse LieutColonel 8
Dirigeerend officier van Gezondheid 3de Klasse Major 7
Officier van Gezondheid 1te Klasse Captain 36 1st Lieutenant 36

Pharmacists.

Title.	Rank.	Number
Dirigeerend Apotheker	Colonel or Major	r 2
Militair Apotheker 1te Klasse	Captain	17 .
", 2de ",	1st Lieutenant	3

First appointment and promotion.

Formerly army medical officers were obtained from the military medical schools in Utrecht and Amsterdam. These no longer exist and candidates are now admitted by nomination of the Minister for War, who publishes yearly the number of vacancies to be filled. Candidates must have passed the State examination, qualifying for the practice of medicine and surgery. They must not be more than 29 years of age, must be physically fit for military service, of good social position and unmarried. On appointment they receive a donation of £225, along with £7 10s, for outfit, and undertake to serve for at least six years as an army medical officer with the active army, and four years as an army medical officer of the reserve. They obtain the rank of 1st lieutenant on appointment, and must then go through a six months' course in the military hospital. Utrecht, where they receive instruction in military hygiene, military surgery and regulations, administration, riding, &c. They are promoted to captain's rank after eight years, if recom-Promotion to higher rank depends upon vacancies in establishments. After going through a course in the military hospital in Utrecht, the young army medical officer is appointed to one or other of the military or civil hospitals, and if he is anxious to continue clinical studies opportunities are given him to attend courses of instruction in surgery, mental diseases, medicine, &c. These courses last for one year and must be held at one of the Universities. Special three monthly courses are held for bacteriology, ophthalmic work, &c. Army medical officers of all ranks are permitted to engage in civil practice with the exception of midwifery.

During the manœuvres and exercises medical officers are appointed to individual units and placed under the administrative medical officer of the brigade or division. They are also employed on army medical technical staff rides, which take place every year under the direction of an officer of the general staff, and take part in the exercises of the bearer companies, which are held once a year on the frontier. As a rule, army medical officers in Holland have considerable general practice amongst the families of officers and soldiers, their wives and children being entitled to treatment free of cost at the public expense.

Army medical officers hold a high position in Holland and have the same rank and rights as officers of other branches of the service with a somewhat higher rate of pay. Every opportunity is given to them for improving their scientific and technical knowledge by means of the University courses, by staff rides, and by the free circulation of scientific journals of France, Germany, and England, in addition they have the full use of the library at the War Office and at the military hospital in Utrecht.

Pay and pension.

The yearly pay and pension of the different ranks are as follows:—

U W 55 +							
						Pay.	Pension.
						£	£
General	•••	•••		•••		460	225
Colonel .	•••		•••	•••		415	175
LieutCol	onel	•••				335	150
Major						290	135
Captain w	rith 12	2 years	' servi	ce		250	17
,,	,, 8	3,,	,,			225	130
,,	,, 4	l ,,	,,			200	150
,,				ears' ser]
First Lieu	ıt. wit	h 4 ye	ars' se	rvice		150	11
,, ,,	wit	h less	than 4	4 years'	ser-		> 75
	v	rice				136	1(

Every medical officer has the right to the pensions mentioned above, provided he has served two years in the rank, is 55 years of age, and has had 30 years' service. Service of over 30 years does not carry with it any higher pension, but service of less than 30 years gives right to a

pension that is determined according to the number of years' service, the least service, however, entitling to a pension of any kind is 15 years. Thus an officer of 15 years' service receives a pension of 15/30ths of the pension of his rank, one of 16 years of 16/30ths and so on. Officers who retire with less than 30 years' service are liable to be re-called up to the age of 55 years. Should an officer be obliged to retire from the service on account of unfitness for military duty he is entitled to a pension according to the number of years' service, and if the unfitness is due to sickness caused in and by the service he receives the highest pension of his rank; if the unfitness is equivalent to the loss of a limb the pension is increased by one quarter.

Pharmacists.

Candidates for appointment as military pharmacists must have passed the State examination in pharmacy "with distinction." They are appointed on the nomination of the Minister of War as military apothecaries 2nd class, and after 10 years' service they are promoted to the first class ranking as captains. On completing 30 years' service they rank as majors. The senior apothecary is the "Directeur" of the army medical stores in Amsterdam which supply the army, navy and colonial troops with instruments, surgical materials and medicines.

Reserve medical officers.

The reserve of medical officers is obtained as follows: -

(1) From army medical officers who have voluntarily retired,

(2) From army medical officers who have retired with pensions before their 55th year of age,

(3) From medical students liable to military service, who have performed no period of military service with the colours, but have engaged, instead, to serve for 10 years as medical officers of the reserve, after they have passed the State examination qualifying for the practice of medicine and surgery. These reserve medical officers undergo three weeks'

training in times of peace every two years, and receive during that time the same pay as medical officers on the active list. In time of war they are incorporated into the army and serve as regular army medical officers.

Administrators of hospitals.

These are four in number, three being captains and one a lieutenant. They supervise the administration of the military hospitals, which are respectively at Breda, the Hague, Amsterdam and Utrecht.

Subordinate personnel of the medical service.

The subordinate ranks of the medical service are composed of :—

- (1) Hospital troops.
- (2) Hospital employés.
- (3) Trained stretcher-bearers.
- (1) Hospital troops.—There are four companies of hospital troops numbered from 1 to 4, being one company for each division in peace. They are attached to infantry regiments for administrative purposes only, as follows:—

No. 1 Company (Amsterdam) to the 7th Regiment of Infantry.

- ,, 2 ,, (Utrecht) ,, ,, 9th ,, ,, ,,

In peace time each company consists of:-

1 officer and 55 to 57 non-commissioned officers and men. The officer is an infantry officer, who is responsible for the interior economy and administration of the company. The rank and file are mainly obtained from the recruits of the annual levy. They undergo six weeks' training with the infantry before being transferred to the hospital companies. On the completion of 8½ months' service many of the men volunteer for another four months' service. In a very few cases men are enlisted as volunteers direct into the hospital companies; they are first attached to an infantry regiment for six weeks' training before doing duty in the hospitals.

About 3 per cent. of the total are volunteers who have transferred from the militia as non-commissioned officers. They engage for six years' service and receive double pay.

Men who join the hospital companies in May can present themselves for examination in October on passing which they are promoted to the rank of "Miliz Korporaal"; on completing their period of service they pass into the reserve. These men form a distinct class from the "Volunteer corporals" mentioned above. By passing a further examination the miliz korporaal may become a hospital sergeant.

(2) Hospital employés.—These men are old soldiers, mostly married, and about 30 years of age, and who not having been very successful in civil life have taken to this hospital work, in order to gain a livelihood. They sign a contract to serve for one year and this is usually renewed from year to year. They are only employed in permanent military hospitals and would be unfit for active service in the field. They rank as corporals and sergeants; the former are employed in the smaller hospitals and the latter, who have more experience and capability, in the larger hospitals. They perform the following duties:—

(a) Cook, in charge of the kitchen.

(b) Porter, in charge of the hospital gate; he admits authorized visitors, sees that articles of food and drink are not brought into the hospital by visitors, and may also be employed as a messenger.

(c) Wardmaster. In this capacity he is the superior officer of all men employed in the wards and is responsible for the attendance on the sick, assists at dressings, operations, &c., and

instructs the ward orderlies.

(3) Trained stretcher-bearers.—These consist of "Ziekendragers" or men of the bearer company and "Hulpziekendragers" or regimental stretcher-bearers. The men of the bearer company are specially selected from among the infantry and are instructed in first-aid and stretcher work for several hours a day in one of the military hospitals for a period of two months. In war time they are allotted to field medical units to complete the establishment; they wear the Red Cross brassard.

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The regimental stretcher-bearers receive instruction in one of the military hospitals in first-aid and stretcher drill while performing their duty in regiments. From each annual contingent the following numbers of men have to be trained as "Ziekendragers":—

Each battalion five men, each squadron of cavalry two men, and each battery of horse or field artillery one man. On mobilization these trained bearers are allotted to field ambulances, or to their own units to complete the medical

establishment.

Nursing Sisters.—In 1910 army nursing sisters called "vrouwelijke verpleegsters" or "zusters" were introduced as a part of the army medical service; the first of these were appointed to the military hospital at Utrecht.

ADMINISTRATION.

The medical service is administered by the inspectorgeneral of medical services, who is in direct touch with the Minister of War. The country is divided into three medical districts, each of which is administered by a colonel (Dirigeerende officier van Gezondheid 1ste classe).

The senior medical officer of each hospital has the same disciplinary power as that of an officer commanding an independent unit. With the approval of the officer commanding a combatant unit he arranges for the performance of all medical duties in the unit. All the medical officers in the garrison are subordinate to the senior medical officer of the hospital, who can detail them for duty with units or in hospitals and is responsible for the performance of all duties in units or hospital.

Military hospitals.

There are altogether 20 military hospitals with a total of 2,400 beds; these are situated in the larger garrisons. In smaller garrisons there are non-dieted hospitals called "Ziekenkamers," these number 22, with a total of 480 beds. In a few cases there is only a "Ziekenzaal" or room in barracks in which patients may be detained for a few days. The system of having regimental infirmaries

and garrison hospitals, which obtains in some other countries does not exist in Holland; all patients not likely to recover within 24 hours are admitted to hospital.

Colonial medical service.

The army of the Netherlands East Indies has its own War Office, one division of which administers the medical

services, both civil and military.

The medical staff at headquarters consists of an inspector-general with a staff of one lieutenant-colonel, one major and one lieutenant, in addition to which there is a pharmacist branch with a staff of one lieutenant-colonel, one major, one 1st lieutenant and two 2nd lieutenants.

In addition to the above staff there are in the Netherlands East Indies 178 medical officers, 20 apothecary officers (pharmacists), eight veterinary officers, and 1,617

subordinate hospital personnel.

This establishment is distributed among the different stations in the Netherlands East Indies in charge of the hospitals and troops. The colonies are divided into three medical districts, each under the charge of a senior medical officer. There are special regulations for the medical services in the colonies.

CHAPTER III.

THE MEDICAL ORGANIZATION IN TIME OF WAR.

GENERAL ORGANIZATION.

The army medical service in war is based on the regulations published in 1897. Its duty is defined as:—

- (1) The maintenance of the health of the army, and
- (2) The care of the sick and wounded.

The Dutch army is organized for operations within the country. When mobilized it consists of (a) The field army and (b) Garrisons for fortified lines and positions.

The army medical organization for war is therefore much simpler than that of most of the great European powers. It is intended to provide each unit with regimental medical personnel and equipment and each division with a medical unit capable of treating the sick and wounded, and of transferring those patients who are fit to be moved to the stationary hospitals in the country.

The administration of the medical service during war.

The medical service of the field army is administered by the director of medical services, who has the title of "Chef van den Geneeskundigen Dienst te velde" and is head of No. 3 section of the general staff. He is assisted by one medical officer of captain's rank and one veterinary officer. A delegate of the Red Cross Society is also attached to his staff. For office and general work he is allowed two medical orderlies, two clerks, one ambulance and one baggage wagon.

Each division has an administrative medical officer with the title of "Chef van den Geneeskundigen Dienst bij de divisie," he belongs to the staff of the division and is chief of No. 3 Section of the divisional staff. He is assisted by a medical and a veterinary officer, and is allowed one

baggage wagon.

Similarly an independent brigade has a senior medical officer with the title of "Chef van den Geneeskundigen Dienst bij de brigade."

Regimental medical service.

The regimental medical service is augmented in time of war by the incorporation of reserve medical personnel. The personnel and equipment allotted to each combatant or medical unit is shown in Appendix III. A company of infantry has one medical orderly (ziekenverpleger), four or more trained stretcher-bearers (ziekendragers) and one wheeled stretcher. In addition the staff of a battalion has two medical officers, one medical orderly, one ambulance wagon and one requisitioned wagon.

On mobilization every officer and man is supplied with a first-field dressing, with printed directions for its applica-

tion. Every medical officer is provided with a pair of saddle-bags containing dressings, instruments, &c., as well as a leather pouch of pocket instruments, which can be attached to the saddle or slung over the shoulder when dismounted. The medical orderlies with units carry a surgical haversack and water bottle.

The ambulance wagons supplied to infantry battalions can carry four sitting-up or two lying-down patients. Each wagon is equipped with two Kromhout stretchers and eight emergency stretchers; they also carry one surgical and one medical pannier. A detached company is supplied with two stretchers. According to the field service tables the cavalry still have pack horses to carry the medical and surgical equipment, but according to reports in the medical press it has been decided to give up the use of pack horses, as the panniers have been found to gall them.

Medical units in the field.

On mobilization the four companies of hospital troops are broken up and the personnel is distributed among the 16 medical sections, which, with the addition of the reserve personnel, furnish 12 bearer-sections and four field hospitals as well as the medical orderlies required for duty with units.

To each division is allotted one field ambulance (Geneeskundige Afdeeling) which corresponds to our field ambulance. This unit consists of:—(a) The bearer division and (b) the field hospital division. The bearer division (verband-plaats afdeeling) consists of three equal sections numbered 1st, 2nd, and 3rd. Each section has five medical officers, one officer in charge of the bearers, 96 N.C.Os. and men, five ambulance and three stores wagons. The personnel and equipment is shown in Appendix I.

The field hospital division bears the same number as the division to which it is attached; it has five medical officers, one apothecary, one administrator, 34 N.C.Os. and men, one ambulance and two stores wagons. The full detail of personnel and transport is shown in Appendix II. A detached brigade is allotted personnel and medical equipment from one of the medical units. One bearer division is kept in

reserve at headquarters.

The surgical stores wagons of the bearer divisions carry, in addition to the medical and surgical supplies, 20 field stretchers. The medical stores wagons of the field hospital divisions carry a field dispensary, instruments, dressings and 10 stretchers on each wagon. The ambulance wagons carry two lying-down or 10 sitting-up patients.

The medical service during an action.

When an engagement is about to take place the A.M.O. of the division in consultation with the general officer commanding the division or his chief staff officer selects the position for the principal dressing station and the collecting station for slightly wounded; the orders for the establishment of these formations are issued by the A.M.O. Some of the personnel and material is kept in reserve; the general rule is to establish the first-aid posts fairly soon after the commencement of the fight, but to delay the opening out of the more stationary ones till it is seen how the fight is likely to end. The A.M.O. is allowed to use his discretion and to alter the arrangements given below to suit any special circumstances.

The regimental medical service.

The regimental stretcher-bearers and medical orderlies fall out and are placed at the disposal of the senior medical officer with the unit who details the personnel to form the regimental aid-post and distributes the remainder for duty with the unit. Medical orderlies and officers with units will render first-aid; stretcher-bearers are not to apply dressings, except in cases of extreme urgency, but are to carry or direct wounded to the aid-posts.

One aid post will usually be formed for each unit, but it is not to be established till its necessity is apparent, and the medical officer can feel fairly sure that there is no likelihood of an immediate retirement taking place; should this happen, the wounded who cannot be removed, must be left with some personnel to look after them; in the event of the troops advancing a fresh aid-post will have to be

opened further on.

Wounded brought to the aid-post will be classified as follows :—

(1) Slightly wounded, fit to return to the ranks after being dressed.

(2) Requiring hospital treatment, but able to walk to

the collecting station.

(3) Those requiring to be carried by hand or in wagons to the principal dressing station.

(4) Cases requiring immediate treatment.

A diagnosis tally is supplied to each man, a line drawn across it means that the man is fit to walk to the dressing station. Only the most urgent operations will be performed at the aid-post; when applying dressings medical officers will endeavour to make them of a lasting nature, in order to obviate the necessity of having to re-dress the patient within the next few hours.

Cavalry units will not establish an aid-post till the attack

has succeeded.

Aid-posts will fly the National and the Geneva Cross flags.

The collecting station.

The site is selected by the A.M.O. with the approval of the G.O.C.; it should be on one flank of the line of evacuation, not too near the dressing station. Its personnel and equipment is detailed by the A.M.O. from the divisional field ambulance. On arrival the wounded are examined, any treatment required is given, and then those able to walk are formed into parties under their own officers or N.C.Os. and despatched to the rear; those unable to walk are sent in requisitioned wagons.

The dressing station (Hoofdverbandplaats) (H.V.Pl.).

The A.M.O. of the division, with the approval of the G.O.C., selects the site for the dressing station, but it is not opened till the A.M.O. gives the order to do so, and he is advised to wait till the progress of the fight makes it clear that a dressing station will be required, and that the site selected is the most suitable for the purpose; in

some cases it may even be found better to wait till the battle is over and then to establish a dressing station at

the site of one of the aid-posts.

The A.M.O. details one or more sections of the divisional field ambulance to form the dressing station. Whenever possible advantage will always be taken of the existence of any buildings, in order to save the time and trouble required to put up shelters for the wounded. If the division occupies a very large front an auxiliary dressing

station may be established.

On receipt of orders from the A.M.O. to open the dressing station the commandant of this formation takes one medical officer with him and rides on ahead to the appointed spot. On arriving there he examines the site and assigns a position to each sub-section. As soon as the personnel arrives the different sub-sections are fitted up, the necessary material being requisitioned or purchased locally. Arrangements must be made to provide hot drinks and refreshments for the wounded, as also for an ample supply of means of illumination as much of the work must be done after dark. Tents will only be used when no buildings are available. Only such packages as are necessary will be opened up so that in case of a sudden retirement the unit will be able to move off quickly.

The dressing station will contain the following sub-

sections:-

(1) The reception section.—On arrival all wounded are received in this section, examined, their names recorded, and a card is given to each man, showing to which section

he is to proceed.

(2) A despatching section.—Men, who on arrival, or after being re-dressed, are considered fit for immediate transfer are sent to this section. Those able to walk are made up into parties and sent off under the command of their own N.C.Os. to the Slightly Wounded Collecting station or to some point on the line of evacuation, selected by the G.O.C. Those requiring carriage are despatched on ambulance or requisitioned wagons.

(3) A dressing section.—In this section the dressing of

wounds is done.

(4) The operation section.—Any men who require operative treatment are dealt with by this section.

After being treated patients from (3) and (4) sections receive a fresh card in exchange for the original one show-

ing to which section they are to be sent.

(5) Unfit for transport section.—If there is any civil hospital in the immediate neighbourhood the patients assigned to this section will be carried there by hand, if not, a field hospital section is ordered up to take them over.

In the event of the troops advancing to a distance beyond the dressing station a fresh one will be opened up by one

of the reserve sections.

The field hospital.

If there are no local facilities for treating wounded who for any reason cannot be transported to the stationary hospitals, a field hospital will be established. This will not usually be done till it is certain that the troops will not have to retire. It will generally be pitched at the site of the dressing station. The senior medical officer will be the commandant with the powers of a battalion commander. The wounded will, if possible, be accommodated in buildings, but if none are available then tents will be demanded from the L. of C. authorities.

The medical service in fortresses and fortified lines.

The medical service of any fortified line is administered by a medical officer having the rank of colonel or lieutenant-colonel with the title of "Chef van den Geneeskundigen Dienst in de Linie (Stelling) van......" This officer has much the same position and duties as the administrative medical officer of a division; he may be assisted by a medical officer. When the lines are extensive they are divided into sections, each of which has a senior medical officer with the title of "Chef van den Geneeskundigen Dienst in de Groep of Sector....." When there is a permanent military hospital in any fortress the medical officer in charge of the hospital becomes senior medical officer of the fortress; if there is no military hospital then the senior medical officer with the troops acts as S.M.O. of the fortress.

Subordinate medical personnel will be allotted to each fortress in proportion to the size of the garrison.

A fully equipped field medical unit will be attached to the headquarters of fortified lines for the purpose of affording medical assistance to the troops occupying the lines.

In fortresses which are liable to be cut off by siege operations, and in which there is no permanent military hospital a temporary hospital capable of accommodating 10% of the garrison will be established. Where the fortress is not likely to become isolated dressing stations with temporary hospital accommodation will be set up.

If there is no military or civil hospital in the immediate neighbourhood, a temporary hospital must be established; such temporary hospitals will be called "Tijdelijke Ziekeninrichtingen der eerste linie." A supply of medical and surgical panniers is kept in readiness for issue to these establishments.

Evacuation and distribution of sick and wounded.

Sick and wounded will be evacuated to:-

(a) Permanent military hospitals.

(b) Civil hospitals.

(c) Hospitals of the Red Cross Society.

When these establishments are insufficient to accommodate all the patients, the following may also be employed:—

(d) Temporary military hospitals established in buildings, huts, or tents.

(e) Private houses, whose owners volunteer to receive military patients.

As the Dutch army is only likely to be employed in its own country the arrangements for the evacuation of sick and wounded are based entirely on the use of the inland means of communication. The general arrangements will be under the control of the inspector-general of the army medical service and will be carried out by the principal medical officers of the three districts into which the country is divided. These districts are as follows:—

No. 1 District. Headquarters, Amsterdam. — It embraces the provinces of North Holland, Friesland

Groningen and Drenthe.

No. 2 District. Headquarters, Utrecht.—It comprises the provinces of Overijssel, Utrecht, Gelderland (north of the Rhine), South Holland (north of the Lek, Nieuwe Maas and New Waterway from Rotterdam to the sea), except the military hospitals at The Hague and Delft.

No. 3 District. Headquarters, The Hague.—It contains the provinces of North Brabant, Zeeland, Limburg, and the southern portions of Gelderland and South

Holland.

When sick or wounded have to be evacuated from the field hospitals the principal medical officer of the district will be informed and he will then make the necessary arrangements for receiving and distributing them to the various hospitals in the districts. In order to carry out the staff work in connection with this duty the Principal Medical Officer will be allowed one medical officer, one lieutenant and a certain number of clerks. Most of these officials are appointed during peace time and must make themselves acquainted with the routine work of evacuation.

It is specially laid down that the medical officer selected for this duty shall in peace time make personal inspections of the district, in order to become thoroughly acquainted with the structure and accommodation of civil hospitals, to select buildings which are suitable for conversion into temporary military hospitals and the steps necessary in order to obtain permission to use these buildings, sites suitable for the pitching of camps and the general arrangements which would have to be made for the care of wounded in private houses.

The lieutenant is responsible for the general plans of sick transport by road or water (those by rail are made by the railway commission), the provision of means of transport, the hiring of civilian assistance, and the provision of and adaptation of hired vehicles for sick transport.

Means of transport for sick.

When the sick have only to be conveyed for a short distance, e,q., when entraining, the following means will be employed:—

(1) Wheeled stretchers. (2) Boats or barges fitted up for the purpose. (3) Ambulance wagons. (4) Requisitioned wagons.

When the sick have to be conveyed for longer distances the following will be used according to circumstances:—

(5) Railways and tram lines. (6) Hired or requisitioned vehicles. (7) Barges fitted up as mobile hospitals. (8) River or canal steamers. As a general rule the lying-down patients will be carried in the upper berths of railway carriages and the sitting-up patients on the seats. First and second class carriages will be reserved for officers and serious cases. Each covered goods van should carry four to five lying down patients. The necessary apparatus for adapting the wagon for the purpose of carrying sick, as also the indispensable equipment for the use of the sick in each wagon will be supplied in a chest, one for each wagon.

In time of peace the principal medical officers of districts will make themselves thoroughly acquainted with the resources of their districts, so that when called on to direct the evacuation of wounded they may be in a position to make the best use of the available means for this purpose. They are directed to pay special attention to the following points: -(1) The accommodation available for sick and wounded in civil and military hospitals; which towns or villages are most suitable for the reception of sick. (2) The sites which would be suitable for the pitching of military hospital encampments. (3) The means of communication, especially those by water, which are suitabe for the use of sick convoys. (4) The public buildings, hotels, &c., which could be easily converted into temporary hospitals. (5) The methods of hiring or requisitioning suitable vehicles for sick transport. (6) The drawing up of schemes for the provision of the necessary personnel required as sick attendants or for convoy work.

In consultation with the general staff of the district they will draw up plans for the evacuation of sick and wounded.

When mobilization is ordered the principal medical officers of districts will make the necessary arangements, and be prepared to open temporary hospitals and provide other accommodation as may be required, and also take steps to provide transport for the evacuation of sick and wounded as well as the personnel which may be wanted.

The administrative medical officers of divisions will send a list daily to the P.M.O. of the district, showing the number to be evacuated, together with the nature of the disability. On receipt of this information the P.M.O. of the district will classify the patients and allot them to the various hospitals according to the severity of the wound or illness.

The arrangements for convoys of sick and wounded by rail or tram are made by the "Permanente Militaire Spoorwegeommissie" on receipt of a requisition from the P.M.O. of the district; when the convoy is to proceed by road or water the P.M.O. will himself make the necessary arrangements for transport, and personnel to accompany it.

CHAPTER IV.

ORGANIZATION AND RESOURCES OF VOLUNTARY AID IN WAR.

THE RED CROSS SOCIETY OF THE NETHERLANDS.

The Red Cross Society of the Netherlands was formed in 1867, but in consequence of the Geneva Convention of 1906, to which the Netherlands adhered on May 25, 1908, the statutes of the society were re-modelled and received the Royal approval on August 12, 1909. The objects of the society are:—

(1) To afford assistance to the sick and wounded belonging to any belligerent armies or navies.

(2) To render assistance in times of calamity at home or abroad

Constitution and organization.

The Red Cross Society of the Netherlands is managed by a Central Committee at The Hague under the presidency

of H.R.H. Prince Henry of the Netherlands. The inspector-generals of the naval and army medical services

are ex-officio members of this committee.

The country is divided into districts, in each of which there is a branch of the society managed by a provincial committee. In smaller places with only a few members a correspondent is appointed by the Central Committee to look after the interests of the society.

The members are divided into ordinary members who pay an annual subscription, and extraordinary members

who undertake to serve in some capacity during war.

Resources of the society for war.

The society will keep at least £8,000 in liquid assets as a war reserve. Branch committees will pay one quarter of their annual subscriptions to the Central Committee, to be kept as a war reserve. In the event of the Netherlands becoming involved in any war all funds of the society and its branches will be placed at the disposal of the Central Committee.

Work of preparation in time of peace.

Branch committees and correspondents will endeavour to carry out the following preparations during peace time:—

(1) The training of persons as sick attendants and stretcher-bearers. No one may be enrolled for these duties who is liable to military service. A list of trained personnel will be kept up by each committee and rendered annually to the Central Committee.

(2) Enter into agreements with medical men, dentists and pharmacists to serve in the society's hospitals for a

period of at least three months in the event of war.
(3) Make similar agreements with clerks, cooks, store-

keepers and chauffeurs.

(4) Make contracts with manufacturers of instruments, disinfectants, medicines and dressings to supply certain

quantities of these articles, if called on to do so.

(5) Make agreements with the owners of suitable buildings for the use of these as hospitals if required for this purpose.

(6) The purchase of clothing, tents, huts, stretchers and materials required for adapting railway wagons, boats and vehicles of all kinds for the transport of sick.

(7) Arrange courses of instruction in first-aid assistance

to wounded and in the nursing of sick.

(8) Lectures on the organization and work of the army medical service in the field and the place of voluntary aid establishments in the scheme.

(9) The organization of voluntary aid for war.

(10) The collection of funds.

In 1910 there were five sick and wounded transport columns, each consisting of four sections with 25 men to a section.

The society had at that time 48 branch committees and 29 correspondents.

Work of the society in time of war.

In time of war the society will:-

(1) Supplement the medical services of the army and navy by providing trained personnel, establishing hospitals, furnishing suitable means of transport for the sick as well as materials required for their use.

(2) Co-ordinate the work of all voluntary aid societies.

(3) Institute an Information Bureau.

(4) Collect funds and gifts for those in hospital.

The general scheme of work to be undertaken by the society is arranged by the inspector-generals of the army and naval medical services, who in the first place inform the Central Committee how assistance can most usefully be given by the society. The Central Committee then sends a statement to the inspector-generals of the army and naval medical services, showing the personnel and material which the society can guarantee to provide.

Article 13 lays down that in the event of mobilization the direction of all voluntary aid will be subject to the authority of the commanders-in-chief of the army and navy, and its administration will be vested in a selected member of the Central Committee with the title of Chief Commissioner (Hoofdcommissaris van het Nederlandsche Roode Kruis). This official is nominated by the Queen in

time of peace; on mobilization he is attached to the staff of the commander-in-chief along with the inspector-general of the army medical service.

Another member of the Central Committee, nominated by the Queen, is appointed Chief Commissioner of Voluntary Aid with the field army. He receives the title of "Eerste Commissaris van het Nederlandsche Roode Kruis bij het veldleger' and is attached to the staff at headquarters. Subject to the director of medical services he controls all voluntary aid with the field army.

Similarly a delegate of the society is appointed to each division with the title of "Commissaris van het Nederlandsche Roode Kruis bij de divisie," who, subject to the administrative medical officer of the division, controls all voluntary aid. Delegates of the society are also appointed to each of the defended lines (verdedigingsstellingen) with duties similar to those of a divisional delegate.

On mobilization of the army being ordered public notices are posted by the authorities calling on those liable to service to join their units at the appointed places. Members of the Red Cross Society will accept these notices as applicable to themselves and will at once proceed to their appointed stations; at the same time the materials prepared in peace time will be forwarded to the centres previously named. When selecting these centres larger towns of at least 10,000 inhabitants will be chosen, and if possible those situated at the junctions of railways, waterways or important roads, so as to facilitate the despatch of assistance in any required direction.

This assistance will take the form of: —

- (a) Sick convoy detachments equipped with a supply of materials for adapting railway wagons, boats or any kind of vehicle for the transport of wounded. These detachments must consist of trained personnel and must have with them the means of providing refreshments for patients, and applying dressings; they should also have wheeled stretchers, motor cars or improvised wagons for transporting sick.
- (b) Nursing detachments.— These detachments should include doctors, trained nurses, pharmacists, cooks, washermen, drivers and conservancy men. They will be

prepared to fit up buildings as temporary hospitals for the accommodation of sick and wounded.

(c) Hospital detachments.—These detachments must consist of trained nursing personnel, but should also include stewards, storekeepers, superintendents and clerks capable of keeping the returns required by the army medical regulations.

APPENDIX I.

PERSONNEL AND EQUIPMENT OF ONE SECTION OF A BEARER DIVISION.

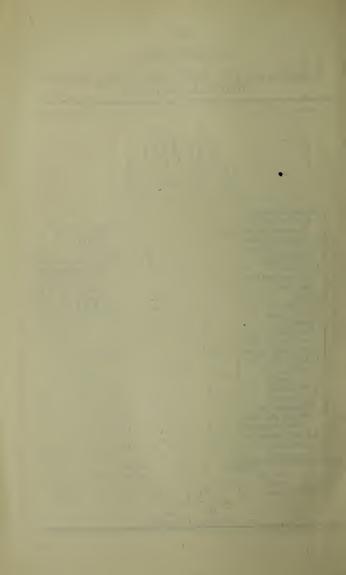
(The whole division has three sections.)

Surgeon Captains and Surgeon Lieutenants 5	(2110 111010 111100 11100 50010110)						
A		Officers.	N.C.Os. and men.			Wagons.	
102 04	and Surgeon Lieutenants The surgeon Lieutenants of the surgeon Lieutenants Serjeants Corporals Orderlies of Medical Corps. Stretcher bearers Quartermaster Serjeant Clerk Officers' bâtmen Military cyclists Serjeant Corporal Baggage cart Surgical material wagon General service wagon Requisitioned wagons, carts or vehicles Wheeled stretchers		3 (b) 16 56 (c) 1 (d) 1 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				the orderlies and bearers. (b) From one of the companies of hospital troops; I or 2 should be instrument of the lieutenant in charge of orderlies. (c) Includes a bâtman for the lieutenant in charge of orderlies. (d) May be an officer. (e) With the reserve dressing station section. 2 men and 2 horses in re-

APPENDIX II.

PERSONNEL AND EQUIPMENT OF A FIELD HOSPITAL DIVISION.

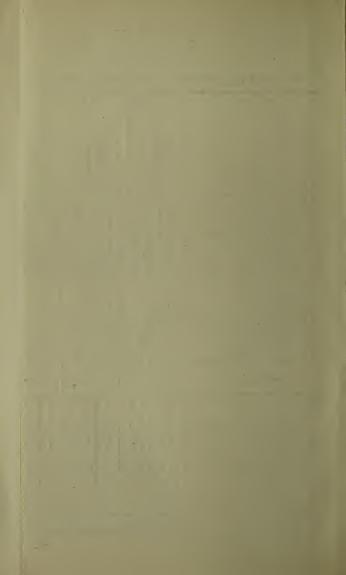
_					1	T	
		Officers.	N.C.Os. and men.	Officers.	. Draught.	Wagons,	
Supplied by From the Medical Service.	Surgeon-Lieuten- ant-Colonel or Surgeon-Major Surgeon-Captains or Surgeon-Lieutenants Quartermaster- Serjeant Clerk Steward Cook Serjeant Corporal Orderlies of the Medical Corps Bâtmen for Officers Serjeant Corporals Baggage cart Wagon for surgical materials Am bulance wagon quisitioned vehicles	1 4 1 1 (a)		1 4			(a) May be a N.C.O. (b) From one of the companies of hospital troops; 1 or 2 should be instrument makers.
_		Pe	41 ersons.	Hon			



APPENDIX III.

TABLE SHOWING THE PERSONNEL AND EQUIPMENT OF THE ARMY MEDICAL SERVICE WITH THE ARMY IN THE FIELD.

	Officers.						N.	C.Os.	and	Men					Horses. Vehicles. Equipment.																	
		Medical Officers.		Orderlies.	Department.			Hos Tro	pital ops.	ol ol		Tn	ain.	Horses				Ambulance Carts.	Wagon.	Vehicles.	Saddle bags, pairs.	_	Surgical Haver- sacks.	Water Bottles.	ack noises.	940	Medical Panniers.	oan o	and Surg Panniers,	Saddle bags, pairs. Pouches.		.rm- ands.
	Administrative.	Executive.	Veterinary.	Lieutenants of O	N.C.Os. Military Cyclist		Cooks	Serjeants.	Orderlies.	Stretcher Bearers	Officers' Bâtmen.	Serjeants.	Drivers.	Artificers.	Officers'.	Draught.	Pack.	Government. Requisitioned. Ambulance Wage	Surgical Equipm General Service	Baggage Carts. Requisitioned V	For Medical	Officers.	For Medical		Stretchers.	Wheeled Stretchere			For Artillery.	For Veterinary Officers.	Water bottles to White with Red	Red.
With a Division. 5. Staff 6. Infantry, 12 batt's c. Cavalry, 5 squad's d. Field Artillery, 6 batt's e. Engineers f. Beaerer division g. Field hospital division Total	ï	1 24 3 4 15 4	1 2 4 1	3	3 3	1	1 1	9 9 1 1	3 11 2 48 16	198 10 12 168 	5 8 15 7	3 3 1 2	2 24 3	4	5	13 24 7 12 87 16	2	12 12 2 4 1 15 1 2 14 17 16	3 3	1 3 1 5	2 24 3 4 15 	2 24 3 4 15 	60 3 11 2 	60 5 11 2 	120 2 16 90 11	2			2	2 2 4 4	2 4 1 30	14 198 198 10 17 12 2 11 14 220
With the Field Army, Headquarters Reserve Dressing Station 3 Divisions Horse Artiflery Grand total	7 16 Med	1 160 37	21 3 3 23 3	13			3 3	50 Hosp	2 440 06 pital	56 1170 4 1230	189	1 1 1 12 15 13 16 Tra	153	2	3 5 186 2 196	8 31 477 4 520	2	42 51 48 42 51 54	12 9		2 5 159 1 167	1	2	234 4 238	3 6 72 2 8 76	2 66 1- 2 60 1-	36	36		1 1 21 21 1 1 23 23 23	18 14	52 666 5 4
	_	09 Of	ficer		-	_	23		V.C.C	Os. an	d me	n.	_																			



APPENDIX IV.

VOCABULARY OF TERMS USED IN CONNECTION WITH THE NETHERLANDS ARMY MEDICAL SERVICE IN THE FIELD.

lies). Pharmacist.

Stretcher.

English.

Administrative officer (com-

mands the medical order-

Dutch.

Administrateur.

Apotheker. Brancard.

Chef van den Geneeskundigen	Director of medical services
dienst te velde.	of the field army.
Chef van den Geneeskundigen dienst te velde bij de Divisie.	Administrative medical officer of a division.
Chef van den Geneeskundigen dienst te velde bij eene zelfstandinge brigade (stel- ling).	Senior medical officer, of an independent brigade (position).
Chef van den Geneeskundigen dienst in eene linie.	Senior medical officer of a fortified position.
Commissaris van het Nederlandsche Roode Kruis.	Commissioner of the Red Cross Society of the Netherlands.
Dirigeerend officier van Gez- ondheid.	Medical officer of field rank.
Dirigeerend apotheker.	Pharmacist of field rank.
Eerstaanwesende officier van gezondheid.	The senior medical officer of a unit or mixed force.
Eerste commissaris van het Nederlandsche Roode Kruis bij het veldleger.	Chief commissioner of voluntary aid in the field.
Geneeskundige dienst.	Medical service.
,, afdeeling.	Field ambulance.
Hoofdverbandplaats.	Principal dressing station.
Hoofdcommissaris van het	Chief commissioner of the
Nederlandsche Roode Kruis.	Red Cross Society of the Netherlands.
Hospitaal soldaaten.	Medical orderlies.

Dutch. English. Hulpziekendragers. Regimental stretcher-bearers. Director General. Inspecteur van den Geneeskundigen Dienst der Landmedical service. macht. Mediciinkist. Medical pannier. The Red Cross Society of the Nederlandsche Roode Kruis. Netherlands. Officer van gezondheid. Medical officer below field rank. Paardenarts. Veterinary surgeon. Wheeled stretcher. Randarbaar. Medical officer's saddle-bag Sacoches. dressings stationery. Medical officer's pouch of Tasch. dressings. Tijdelijke ziekeninrichtingen Temporary hospital for a der eerste linie. fortified position. Veldhospitaal. Field hospital. Verbandplaats. Dressing station. afdeeling. Bearer division of the field ambulance. with surgical Verbandwagen. Wagon dressings. Orderlies dressing case. Verbandtasch. Verbandkist. Surgical pannier. Versamelplaatsen voor marsch-Collecting stations for vaardige gewonden. slightly wounded. Waterflesch. Water bottle. Ziekendragers. Men belonging to the bearer section of the field ambulance. Ziekenkamers. Non-dieted hospitals. Ziekenkarren. Ambulance carts. Ziekenverpleger. Medical orderly. Ziekenwagen. Ambulance wagon.

Ziekenzaal. Zuster Sick room in barracks.

Nursing sister.

THE MEDICAL SERVICE OF THE BELGIAN ARMY.

CHAPTER I.

HISTORY.

The Kingdom of Belgium did not become an independent State till 1830. Soon after this event, its Army Medical Service was formed; the first regulations were issued in 1834. In drawing these up the Belgian authorities relied largely on the international guarantee of their country's neutrality, and the regulations were consequently framed mainly with a view to providing for the peace requirements of the army. The most interesting feature of these regulations is that, unlike those of most other countries at that time, they invested the Army Medical Service with full control of all medical and sanitary matters.

In 1847, fresh regulations were issued, which improved the position of the army medical officers doing duty with troops. Some further modifications were introduced in 1854.

The European Wars which took place during the following 20 years showed the necessity for a re-organization of the Army Medical Service, if it was to fulfil its purpose in war.

A commission was appointed in 1871, under the presidency of the then Inspector-General de Caisne, to draw up regulations for the Army Medical Service in war.

In 1874 this commission presented a scheme which was accepted by the Minister of War, and came into force on 27th of May, 1874. The principles laid down in this Règlement sur le service de santé en campagne have been embodied in the edition of 1897, which is the present Field Service Manual for the Belgian Army Medical Service.

The regulations for the administration of hospitals in peace time are embodied in the "Règlement sur le service des Hôpitaux Militaires" and "Instruction sur le service des Hôpitaux Militaires"; both were published in 1904.

CHAPTER II.

THE MEDICAL SERVICE IN TIME OF PEACE.

GENERAL MILITARY ORGANIZATION.

The Belgian military forces consist of: -

I. The regular army. II. The "Garde Civique."

III. Gendarmerie.

I.—The regular army numbers 42,000 in peace and is capable of being expanded up to 180,000 men in war. It is recruited on the principle of universal service; every man must during his twentieth year of life present himself for military service, but only one son is taken from each family. Certain exemptions are allowed for family and medical reasons, and some of the professions are excused from service in peace time, but are liable to be called up on mobilization to serve in civil capacities in the army. Each year's contingent is called a "class"; the recruits of the current year, which dates from October 1st, being the first class, which in the following year becomes the second class.

The term of service is eight years in the active army and five years in the reserve. The actual period of training is as follows:—

Infantry, garrison artillery, engineers ... 15 months.

Cavalry and horse artillery ... 24 ,,

Field artillery and train ... 21 ,,

Administration battalion ... 112 ,,

Subsequent periods of training take place in the 2nd and 3rd or 4th years of service as follows:—

 Cavalry and horse artillery ...
 ...
 6 weeks.

 Engineers
 ...
 ...
 ...
 8 ,,

 Other arms
 ...
 ...
 ...
 4 ,,

In addition to the annual contingents there are certain classes of volunteers.

Volontaires de carrière.—These men are permitted to enlist between the ages of 16 and 35. The term of service is for 13 years, of which three are with the colours and the remainder in the reserve, but service under 18 years of age does not count. These volunteers are allowed to select the arm of the service in which they wish to serve.

2. Volontaires du contingent.—These are youths liable to serve, but who volunteer to enlist before being called up; the period of service is the same as that of other recruits.

3. Volontaires de réserve are men who agree to extend their service in the reserve by 2 or 4 years. They receive a bounty of £4 to £6.

4. Rengagés are men who on completion of their colour

service re-engage for periods of two years at a time.

II. The Garde Civique.—This is a constitutional force charged with the maintenance of order and the preservation of the independence and integrity of the State. In every town of over 10,000 inhabitants and in every town in which there is a fortress there is a Garde Civique.

The corps is organized by "communes" or groups of "communes," which in turn are grouped into four circonscriptions or districts, each of which is under a general as commandant. The entire corps is commanded by an

inspector-general, who is chosen by the King.

The force is under the control of the Minister of the Interior, whose authority is exercised through the civil

governors and burgomasters.

The corps consist of two bans; every able-bodied male inhabitant residing in the towns mentioned above, who has sufficient means to provide the requisite uniform, is liable to serve in the 1st ban between the ages of 20 and 32, and in the 2nd ban between the ages of 33 and 40. Exemptions are granted on account of active military service and to certain functionaries.

Officers above the rank of lieutenant are nominated by the King, others are chosen by the men themselves. The

training is as follows: -

1st Ban.—Before being incorporated in his unit each man must undergo 30 drills of not less than two hours' duration and be passed as efficient. For the remainder of the period of service in the first ban the men are liable to undergo six drills of two hours' duration per annum. They may also be called out for a period of not more than five days for company and battalion drills.

2nd Ban.—Men of the 2nd ban may be called on to undergo three drills annually of not less than two hours.

There are also certain special companies made up of volunteers from the *garde civique*, which are much more highly trained. The strength of the 1st ban is about

41,000 men and of the 2nd ban about 13,000.

III.—Gendarmerie.—This is a semi-military force, under the orders of the Minister of War in all matters appertaining to discipline, pay, promotion, clothing, remounts and material; in regard to the maintenance of public order it is subject to the Minister of the Interior. The force is organized in a staff and nine companies. It numbers a little over 3,000 officers and men, of whom about one half are mounted. It has only one medical officer.

In war it furnishes a squadron of divisional cavalry to

each division.

Belgium is divided into four military districts with headquarters at Ghent, Antwerp, Liège and Brussels respectively. Each district is commanded by a lieutenant-general. In peace the army consists of 58 battalions of infantry, 40 squadrons of cavalry, four batteries of horse artillery, 30 batteries of field artillery, 51 batteries of garrison artillery, one regiment of engineers, one battalion of train and one battalion of administration (supply and hospital services).

General organization of the medical service.

The army medical service consists of: -

- (1) Le corps des officers du service de santé de l'armée. (2) A hospital section of the bataillon d'administration.
- (3) A certain number of employés in military hospitals.
- (4) Sisters of mercy who undertake nursing duties in military hospitals.
- (1) The corps de santé militaire includes medical officers, pharmacists and veterinary officers. The Budget for 1911 provided for 175 medical officers, 54 pharmacists and 29 veterinary officers.

Medical officers.

Title.	Rank.	Number.
Inspecteur général		1
Médecins principaux de 1re classe	Colonel.	6
$,,$ $\bar{2}$ me $c\bar{l}$ asse $$ $$		11
Médecins de régiment 1re classe	Major.	15
$,, 2me\ classe$ $$ $$	Senior Captain.	22
Médecins de Bataillon 1re classe		
$,, 2me\ classe$ $$ $$	1st Lieutenant.	42
Médecins adjoints de 1re classe	2nd Lieutenant.	. 18
$,, 2me\ classe \dots \dots$	2nd Lieutenant.	. 18

Pharmacists.

	Title.		Rank.	Number.
Pharmacien en	chef		 Lt. Colonel.	1
Pharmaciens p	rinčipaux		 Major.	4
Pharmaciens a	le 1re classe	3	 Senior Captain.	13
,,	2me ,,		 Junior Captain.	10
,,	3me ,,		 1st Lieutenant.	7
,,	4me ,,		2nd Lieutenant.	
٠,,,	adjoints		 2nd Lieutenant.	. 10

Pay.

The pay of medical and pharmacist officers is fixed according to their relative rank, namely:—Major-General £540 per annum, Colonel £340, Lieutenant-Colonel £280, Major

£252, Senior Captain £204, Junior Captain £168, 1st Lieutenant £130, 2nd Lieutenant £100 on joining, increased to £104 after about two years' service. If on the unemployed list (de disponibilité) a small deduction is made from the above. There is also a "non-activité" category, in which the pay is further reduced, the amount of reduction depending on the reason for which the officer was placed on this list. When finally retired from the active list (en réforme) the pension is about one-third of the full pay of the rank.

First appointments and promotion.

Belgium does not possess an Army Medical School. Medical officers join the Corps des officiers du service de santé by enlisting in the bataillon d'administration. The bataillon d'administration includes among other sections three which are termed collectively Le service des secours de l'armée; these are:—

(1) Section des hôpitaux.

(2) Section des infirmeries vétérinaires.

(3) Section de l'aumônerie.

Each of these sections comprises two categories:—

(1) The permanent paid establishment, the strength of which is fixed by Royal decrees.

(2) A reserve establishment, which does not receive any pay and the strength of which is not limited

The service des secours is further subdivided into personnel d'ordre or permanent administrative officials, and personnel technique or executive officials, who may be permanent or on the reserve.

Personnel technique.—A student of medicine or pharmacy or a fully-qualified medical man or pharmacist may apply for permission to enlist into the personnel technique of the Section des hôpitaux, either as a volunteer or on being called up for service in the national army. On enlisting he is graded according to the stage he has reached in his professional studies. Thus, if he has passed the first two professional examinations, he enlists as aspirant, with the rank of corporal; to enlist as auxiliaire, ranking as a serjeant,

he must have passed the two first portions of the final professional examination. Students who desire to enrol themselves in the Section des hôpitaux, if not already serving in the army, must enlist for a term of eight years and sign a special declaration.

They will forward an application, accompanied by certificates of identity, moral character and professional examinations passed, to the inspector-general of the medical services, who, if he approves, passes it to the Minister of War.

Médecins aspirants and auxiliaires must provide themselves with the prescribed uniform, which is similar to that of a junior army medical officer, but without embroidery, lace or stars. They do not ordinarily receive pay, but if sent to camps, taking part in manœuvres, or in case of being mobilized, they receive from 6d. a day, with rations, to 2s. 6d. a day, according to the circumstances.

Médecins aspirants and auxiliaires must reside in the town in which they are studying, and are subject to the authority of the senior medical officer. An army medical officer is appointed to instruct them in military medical subjects. When they have passed their final medical examinations, they have to attend for instruction in the military hospitals, but will not be employed on garrison duty. They will attend a course of equitation in a garrison town.

Permanent leave may be granted to medical men serving in the army, who possess the diploma of Doctor of Medicine. In time of peace they cannot be called on to serve except by a special order from the Minister of War.

Promotion.—A médecin aspirant becomes médecin auxiliaire when he fulfils the conditions laid down for an auxiliaire on enlistment. Both of these classes must go up for the examen de Brancardier, after serving for 18 months. If they fail to pass this examination on two occasions, they are removed from the Section des hôpitaux; failure to pursue their professional studies at the university in a satisfactory manner also entails removal from the Section des hôpitaux. In case of dismissal students are posted to another branch of the service.

Médecins auxiliaires who wish to obtain a commission in the army medical service have to pass a special professional examination; they are classed in three groups according to the marks gained. If they have passed this as well as the final professional examination of their school of medicine, and possess the necessary qualifications for an officer, they may be appointed médecin suppléant (surgeon on probation) on the recommendation of the inspector-general of medical services. A médecin suppléant wears an officer's uniform, but with a warrant officer's badge of rank. He draws 2,050 francs (£82) per annum, and performs the same duties as a médecin adjoint 2me classe.

Vacancies in the medical officers corps are filled up from among the médecins suppléants, who must (a) be of Belgian nationality, (b) be fully qualified medical men, (c) be 28 years of age and under 30, (d) agree to serve for eight years in the army and, (e) have passed the special professional examination for médecins suppléants.

Promotion above the rank of médecin adjoint is conferred by the King, and is made partly by seniority and partly by selection, according to the reports furnished by his superiors. Up to the rank of médecin de régiment 2me classe a medical officer must have served a minimum of two years in each rank before being promoted to the next senior rank. A médecin de régiment 2me classe must serve for at least four years before being promoted to the 1re classe and must serve three years in this rank before being advanced to médecin principal.

Pharmacist officers enter the service in the same way as medical officers, and have corresponding titles.

Reserve personnel.

The reserve of medical and pharmacist officers consists of doctors and pharmacists belonging to the personnel technique of the section des hôpitaux of the bataillon d'administration, who on qualifying as médecin or pharmacien suppléant have been granted congé illimité or permanent leave.

MEDICAL SERVICE RANK AND FILE.

The subordinate ranks of the army medical service are furnished by the section des hôpitaux of the bataillon d'administration. In addition to the medical and pharmacist students, who are qualifying for a commission in the active army, there is a cadre of approximately 120 non-commissioned officers and men employed in hospital These men enlist for service in the section des hôpitaux of the bataillon d'administration; to be accepted for the duty of "infirmier" they must be able to read and write, and be intelligent; they are trained in nursing duties by the medical officers and sisters in the military hospitals. In addition to these men there are a number of "ouvriers" also belonging to the bataillon d'administration, who are employed as cooks, clerks, &c., in the military hospitals. A certain proportion of "civilian employés" is also allowed to complete the establishment of military hospitals, and in case of necessity civilian male nurses may be temporarily engaged with the sanction of the War Office.

The daily pay of the rank and file varies from 10 centimes in the case of a 2nd class soldier to 1 frc. 39 centimes in the case of a 1st class sergeant.

Nursing sisters.

A certain number of nursing sisters (sœurs hospitalières) are employed in nursing sick soldiers in military hospitals. They are engaged by the Minister of War, through the governing bodies of the religious orders; in each hospital at least one sister must undertake the supervision of the hospital kitchen. In 1911 the number of sisters employed was 78, at a remuneration of 900 frcs. (£36) per annum each.

Administration.

The inspector-general of medical services is under the direct orders of the Minister of War, and is technical advisor to the War Office on all medical or sanitary

matters. All army medical officers are under the supervision of the inspector-general in all matters relating to their service.

Each of the four military districts of Belgium is administered by a médecin principal 1re classe, who reports on all matters affecting medical officers or military sanitation to the inspector-general; these officers are also directors of the military hospitals at the headquarters of each district. A médecin principal 2me classe is in charge

of each of the other military hospitals.

The medical officer in charge of a hospital also exercises technical supervision over the médecins de régiment and bataillon doing duty with troops in the garrison. Each regiment has a médecin de régiment in charge and one médecin de bataillon for each battalion. The médecinsadjoints are, as a rule, employed on hospital duty. The rank and file employed in hospitals belong to the bataillon d'administration and except for purely medical work are under the orders of the officier d'administration doing duty in the hospital.

The bureau des hôpitaux at the War Office deals with statistics, supplies and all matters relating to the interior

economy of military hospitals.

Military hospitals.

There are 16 military hospitals in Belgium. Their distribution and accommodation are as follows:—

1st Military District: Ghent, 300 beds; Termonde, 100; Bruges, 150; Ostende, 100; Ypres, 100. 2nd Military District: Antwerp, 525 beds; Malines,

3rd Military District: Liège, 300 beds; Camp of

Beverloo, 350; Arlon, 100.
4th Military District: Brussels, 325 beds; Louvain, 250; Vilvorde, 100; Mons, 150; Tournai, 150; Namur. 162.

There are in addition one or two infirmeries militaires, which are only small non-dieted hospitals temporarily installed to meet occasional requirements or as sections of the larger hospitals.

The management of each hospital is sub-divided into the (1) Service de l'ordre; (2) Service des soins; (3) Service de l'exploitation. The first and last sub-divisions constitute the services administratives and are controlled by the officer d'administration chargé de la gestion de l'hôpital.

The service de l'ordre is responsible for all clerical work in connection with the admission and discharge of patients to or from hospital, the supervision of all personnel not actually employed in attending to patients. The service de l'exploitation has to provide clothing, bedding, diets, fuel, &c., as demanded by the medical officer in charge of the hospital, and is also responsible for the lighting, furnishing and cleanliness of those portions of the hospital and grounds not occupied by patients. It also manages the messing, lodging and pay of the subordinate personnel of the hospital.

The services administratives of the hospital are under

the supervision of the intendance officer of the district.

The service des soins undertakes the actual care of the sick, as also all matters affecting their welfare, e.g., the sanitation of the hospital, the quality of the provisions supplied and the ordering of diets, patients' clothing, &c. This service is controlled by the senior medical officer of the garrison with the title of médecin directeur de l'hôpital.

The dieting of patients is on the French system and is divided into aliments ordinaires and extraordinaires. The former is ordered either complete or in fractions of $\frac{3}{4}$, $\frac{1}{2}$, $\frac{1}{4}$, and there is also a diète avec pain and a diète sans pain. Extra articles may be ordered in special cases.

Regimental medical service.

The medical officers doing duty with troops are under the supervision of the director of the military hospital in the town in regard to the treatment of sick and sanitary state of barracks. One corporal from each battalion is detailed to assist the medical officer in charge of the battalion.

Army medical journal, &c.

The "Archives Medicales Belges," published monthly at Brussels, is the official journal of the corps sanitaire de

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l'armee. In addition to official notices affecting medical and pharmacist officers, it contains original articles of interest to the medical service.

Medical and pharmacist officers are invited to send papers and accounts of cases or original work of professional interest to the *inspection générale*. The best paper of the year is awarded a prize of £4.

In every hospital there is a reference library for medical officers. The State makes an annual grant for the upkeep

of these.

Army medical officers are permitted to engage in private practice.

Medical service of the garde civique.

In peace time the garde civique has its own independent medical organization; on mobilization this service is assimilated to that of the regular army, and placed under the orders of the inspector-general of the army medical service. In each of the four military districts there is a medical director with the rank of colonel or lieutenant-colonel. Each "commune" or group of "communes" has a chief medical officer having the rank of major.

Each regiment has a regimental medical officer with the rank of captain and three battalion medical officers with the rank of lieutenant; these are appointed by the King. In addition to this there is a medical officer to each company, making nine to a regiment. The company medical officers are elected by the men of the company. They must be fully qualified doctors, physically fit, and must undertake to study the army medical organization, so as to be competent to serve with an army in the field. These medical officers are allowed to engage in private practice, and are exempted from the obligation to serve in the army.

A certain number of men of the civic guard are trained in stretcher-bearer's work. The garde civique also possesses some field ambulance equipment.

CHAPTER III.

THE MEDICAL SERVICE IN TIME OF WAR.

The Belgian army, like the Dutch, is organized for operations within the country. When mobilized it consists of a field army organized in four divisions, and garrisons for the fortified lines and fortresses.

GENERAL MEDICAL ORGANIZATION.

The medical service of the field army is organized as a distinct branch of the army under the direct authority of the commander-in-chief. It is administered by the director of medical services at general headquarters (médecin en chef de l'armée de campagne) and the administrative medical officers of divisions (médecins divisionnaires).

The medical service in the field comprises:—

I.—The regimental medical service (le service des corps

de troupe).

II.—Field Ambulances. (Les colonnes d'ambulance.) This corresponds very closely with the bearer company, which formerly existed in our organization.

III.—Field Hospitals. (Les hôpitaux volants.)

IV.—Voluntary aid organization furnished by the Red Cross Society of Belgium.

Administration in the field.

Subject to the authority of the commander-in-chief the director of medical services of the army is the commander of the medical service in the field, and similarly the administrative medical officers of divisions command the medical units of the division. They are charged with the initiation and supervision of all sanitary precautions for the maintenance of the health of the army and the administration of the services under their command.

The director of medical services of the army has one médecin de régiment, one médecin adjoint, one pharmacien principal, one pharmacien suppléant and a secretary from the bataillon d'administration as his personal staff. On the first day of mobilization the director of medical services of the army has to report himself at general headquarters to receive any instructions from the general officer commanding-in-chief. He then submits any proposals he wishes to make in regard to sanitary matters affecting the army generally; he is held responsible that the medical services are in every way complete before the army takes the field. When the army is stationary the director of medical services will initiate any sanitary precautions which he deems advisable for the maintenance of the health of the army. When an action is expected the director of medical services will arrange for one or more centres of evacuation and for the necessary hospital personnel and material; he will make these centres known to the troops. He will either personally direct the service of evacuation or hand it over to the médecin de régiment on his staff.

During an action the director of medical services will remain with the headquarter staff to direct the medical services and to keep the general staff informed of the condition and position of the various medical units.

The administrative medical officer of a division is the general officer commanding's staff officer for medical services and commands the medical services of the division. He is also the representative of the director of medical services of the army in all sanitary and professional matters. He has one médecin adjoint to assist him. If it is likely that an action may be fought the administrative medical officer of the division after consultation with the general staff will select the most suitable places for hospitals and make arrangements to accommodate as many wounded as possible. When the battle is about to commence he will, subject to the approval of the general officer commanding, select a site for the dressing station, and arrange for the transport of wounded from the dressing station to the field hospital.

When the battle has begun the administrative medical officer will proceed to the headquarters of the division and

remain there till the dressing station has been opened by order of the general officer commanding. administrative medical officer will then proceed to the dressing station, and from this point will direct the medical services during the engagement.

REGIMENTAL MEDICAL SERVICE.

Personnel.

The following is the medical personnel with each unit in the field:-

A regiment of infantry: one senior medical officer in charge, one serjeant in charge of stretcher-bearers; each battalion: one medical officer and one assistant medical officer, one corporal in charge of bearers; each company, three regimental stretcher-bearers.

A regiment of cavalry: three medical officers, one serjeant, three corporals of stretcher-bearers and three

stretcher-bearers per squadron.

A regiment of field artillery: one senior medical officer and a serjeant of stretcher-bearers; to each group of batteries: two medical officers and a corporal of stretcherbearers, each battery, three stretcher-bearers.

Other units have the same proportion of medical

personnel.

Medical and surgical material.

Every man carries a first field dressing, consisting of a triangular bandage, a pad of absorbent wool enclosed in gauze, and three pins; it is enclosed in paraffin paper

and waterproof cloth.

Each infantry regiment has a medical cart which carries 46 pouches containing dressings, 46 water bottles, 46 brassards, 18 stretchers, a 6½ gallon cask of water, 12 lanterns, 18 blankets, a national and a Geneva cross flag, also medical and surgical panniers. The medical cart follows the regiment on the line of march.

With independent cavalry divisions each ambulance wagon carries a supply of medical and surgical material.

In other units a small supply of medical and surgical material is carried in the baggage wagons.

On mobilization the senior medical officer takes over the medical and surgical equipment and inspects the regimental stretcher-bearers. He classifies these into (a) men to be sent to the field ambulance; (b) those who are to fall out for bearer work when an action is expected and (c) those who are to remain in the ranks as a reserve of bearers to be employed when the battle is over. In the cavalry the stretcher-bearers will not fall out until the fighting is over.

During halts the senior medical officer of the regiment will open a regimental sick room for the treatment of trivial cases.

Field Ambulances.

There are three somewhat different types of field ambulance $(colonnes\ d'ambulance):$ —

(1) The headquarters field ambulance.

(2) The divisional field ambulance.

(3) The cavalry field ambulance (see Appendix II).

The divisional field ambulance is divisible into three sections (for personnel and transport see App. I).

A field ambulance is commanded by a médecin de bataillon with the powers of a commandant of a detachment; it is usually attached to a combatant unit for administrative purposes. An officer d'administration performs the duties of quartermaster and an officer du train is in charge of the transport. Both these officers are under the orders of senior medical officer of the field ambulance.

When the army is halted for a time the field ambulance may establish a temporary hospital (une infirmerie de campagne) for the treatment of less serious cases likely soon to return to duty. For this purpose a building will be selected and fitted up with materials obtained locally.

When the army is moving the general officer commanding will notify daily in orders the place to which sick from units are to be sent. If the field ambulance is unable to get there, a medical officer with some orderlies must be detached to take over the sick and provide some kind of accommodation for them.

During an engagement the field ambulances will work in conjunction with the regimental medical service in order to effect, as far as possible, the speedy transport of all wounded to the field hospitals.

Field hospitals (les hôpitaux volants).

Each division has two field hospitals. They are intended to take over the sick and wounded from the field ambulance. (For personnel and transport see App. III.)

Each field hospital is commanded by a médecin de regiment, but for administrative purposes it is attached to a regimental unit. It has only one ambulance wagon,

but has transport for its own equipment.

During halts the field hospital may establish special hospitals $(h\hat{o}pitaux speciaux)$ for the reception of contagious diseases; for this purpose the necessary materials will, as far as possible, be obtained locally. The field hospitals will usually march with the supply columns, but if an engagement is expected they will be brought up to the baggage column. During an engagement the field hospitals will be employed at the discretion of the administrative medical officer of the division, either to assist the field ambulances by taking over the more serious cases at the dressing stations or to form an echelon for the evacuation of the wounded. When a battle is expected the field hospitals may be called on to establish temporary hospitals $(h\hat{o}pitaux\ de\ campagne)$.

The medical service with a division in the field.

The medical service of a division in the field consists of four echelons:—

1. The medical service in the firing line (le service de la ligne de combat).

2. Regimental aid-posts (le service des postes de secours).

3. Dressing stations (le service des places de pansement).
4. Field hospitals (le service des hôpitaux volants).

The first two echelons are found by the regimental medical personnel. When an engagement is about to take place the regimental stretcher-bearers and medical

officers fall out. The senior medical officer of the regiment then tells off one médecin de bataillon and three médecins suppléants for duty with the troops in the firing line. The remaining personnel proceeds to the regimental aid-post; orderlies from the field ambulance are sent up to complete this post. The regimental medical cart is brought up and the regimental stretcher-bearers place their rifles in it. They are then formed into squads of three men each; each squad receives a stretcher, water bottle and three packages of dressings. The squads are then distributed at different points along the firing line.

When the aid-post has been established and the regimental stretcher-bearers equipped and despatched to the firing line the senior medical officer of the regiment reports himself to the administrative medical officer of

the division at the field ambulance.

The regimental aid-post of an infantry regiment has two médecins de bataillon and four orderlies furnished by the field ambulance. It will usually be established in some sheltered spot at 500 to 1,000 yards behind the fighting line; only the most urgent work will be undertaken at these spots and mainly with a view to returning the man to the fighting line or to expediting his transfer to the dressing station. Wounded requiring carriage will be brought from the front by the regimental stretcherbearers to the aid-post, where they will be classified into three groups (1) those fit to walk to the dressing station, (2) those requiring carriage, who will be taken over by the bearers of the field ambulance and loaded into ambulance wagons, (3) those unfit to be moved, and who must be accommodated on the spot.

Dressing stations.

During an engagement each field ambulance will establish a dressing station, with the following personnel: Five médecins de regiment; one médecin de bataillon, in command of the field ambulance; one médecin adjoint; 13 médecins suppléants; 90 non-commissioned officers and men (less those sent to the regimental aidposts). There are also three serjeants of stretcher-

bearers, six corporals and 70 stretcher-bearers attached to the field ambulance.

The dressing station will be established in a suitable position from 2,000 to 3,000 yards in rear of the centre

of the division.

The administrative medical officer of the division will select the site; the medical officer in charge of the field ambulance will then proceed to establish the dressing station. It will be divided into (1) A receiving section, (2) a section for the application of dressings and splints, (3) operation section, (4) a general service section, containing kitchen, &c. Bedding, mattresses, lamps and other necessary articles will be collected locally. As each wounded man is dressed a diagnosis tally showing his particulars will be attached to his clothing.

The wounded will be evacuated to the field hospital as speedily as possible by means of the transport belonging to the field ambulance, requisitioned wagons will, if required, also be employed. One orderly will be detailed to accompany every 20 to 30 wounded. If the dressing station is near a railway station patients will be transferred directly to the hospitals in the interior of the

country.

In the case of a cavalry division the general officer commanding will decide when the work of collecting the wounded is to commence. The administrative medical officer of the division will then establish the dressing station; the regimental stretcher-bearers fall out and proceed to collect the wounded.

The field hospitals are intended to take over the sick and wounded from the dressing stations. They will be established by order of the general officer commanding, on the recommendation of the administrative medical officer. Patients will be transferred as soon as possible

to the hospitals in the interior of the country.

Medical service in fortified lines.

The medical service of a fortified position is directed by a médecin chef du service sanitaire with the same powers and duties as the director of medical services of the army in the field. According to the size of the

defended area it may be divided into one or more sections to each of which an administrative medical officer is allotted; his powers and duties are similar to those of the administrative medical officer of a division. When the existing hospitals have not sufficient accommodation temporary hospitals will be established. A field ambulance forms part of the medical organization of fortified positions. In each fortified area a sanitary committee will be formed under the presidency of the director of medical services. This will consist of representatives of the military medical and engineer services, a delegate of the Red Cross Society, civilian medical men, the civil engineer and representatives of the civil authorities. This committee will act as an advisory board on sanitary matters and will suggest to the general officer commanding any sanitary precautions necessary for the maintenance of the health of the army and civil population in the fortified area.

The evacuation of sick and wounded.

Sick and wounded will be evacuated to the permanent hospitals in the country. As the distances to be traversed are not great, there is no organization for a medical service on the lines of communication.

The general staff will inform the field ambulances and field hospitals, where men to be evacuated are to be sent and the route by which they are to travel. The medical officer in charge of the evacuation service will classify them into ordinary cases, i.e., minor injuries, and special cases, i.e., those suffering from severe injuries. Nominal rolls of each group will then be sent to the director of medical services of the army and the inspector-general of the army medical service.

The director of railways will provide the permanent ambulance trains. Each of these consists of 120 3rd class carriages. If this number is insufficient additional trains, made up of ordinary carriages and covered goods vans, will be provided. The permanent ambulance trains are provided with the necessary utensils, bedding, refreshments, dressings and medicines. The personnel will, as a rule, be found by the Red Cross Society. Temporary

ambulance trains will have a square of white cloth 8 inches × 8 inches, with a red cross in the centre, attached to each side of the wagons while used for transporting sick. When the sick and wounded have been removed the red cross emblem will be taken off again. The personnel of an ambulance train will consist of: one medical officer in charge of the train, an officer or serjeant-major of the bataillon d'administration in command of the personnel; one trained orderly or one slightly wounded man capable of assisting his comrades will be allotted to each wagon. The personnel will be detailed by the medical officer in charge of the evacuation service.

The commandants of provinces who are responsible for army services on the lines of communication will appoint a committee (commission de gare) at each of the principal railway stations. This committee will be composed of four members representing the local civil authorities, the railway authorities, the intendance corps and the Red Cross Society respectively. It will be charged with the duty of faciliating the loading or unloading of ambulance trains, as also of making arrangements generally for the comfort of the patients.

At stations which are likely to be more or less continuously made use of for the evacuation of sick and wounded, a temporary hospital will be established for the purpose of receiving patients requiring accommodation pending transfer or for those unfit to travel any

further.

Convoys of sick and wounded will not be sent by road if this can be avoided. When circumstances make the adoption of this method necessary the number of patients will not exceed 100 in any one convoy. Locally requisitioned wagons and those furnished by the Red Cross Society, will be employed in preference to taking ambulance wagons from medical units. One medical officer and 10 attendants will accompany each convoy of 100 patients. The national and Geneva cross flags will be placed on the first vehicle.

CHAPTER IV.

THE ORGANIZATION OF VOLUNTARY AID.

The Red Cross Society of Belgium is the only society which is authorized to assist the army medical service in war. Any other society or philanthropic body desiring to afford assistance to sick or wounded soldiers must affiliate itself to the Red Cross Society, and work under

the direction of the Central Committee.

The Belgian Red Cross Society became an incorporated society by Act of Parliament of 30th March, 1891, which accorded the society special rights to hold property and money under conditions compatible with the object of the society: namely, to afford succour to sick and wounded soldiers in time of war. For this purpose it is obliged to make preparations in time of peace, in order to have ready on the outbreak of war, ambulance material, dressings, surgical instruments, &c., and to form voluntary aid corps of medical officers and sick attendants on lines laid down by the War Office.

The Committee of Direction is appointed by the King; and must submit a statement of receipts and expenditure on a special government form, annually to the War Office.

In the Act of Incorporation, it is also laid down that the manner in which the society shall help the regular Belgian army medical service in war, or belligerents of foreign powers at war with one another, will be deter-

mined by Royal decree.

The Act also provides for the punishment of any one using the name or badge of the Red Cross for appeals to public charity or for trade purposes, without special authority, and also for the punishment of any person wearing the Red Cross brassard without regular authority.

The conditions under which the Belgian Red Cross Society shall aid the War Office in time of war, as an auxiliary to the regular army medical service, are contained in a Royal Decree, dated 22nd January, 1892.

Art. 1. Permits the society to aid the army medical service and approves its statutes.

2. Recognizes its area of work as the whole of Belgium,

with headquarters in Brussels.

3. The committee of direction can form sub-committees; philanthropic societies can be admitted as sub-

committees under special conditions.

4. A representative of the War Office will be a member of the committee of direction. This officer will propose the nature and organization of the duties and service which the association binds itself to undertake.*

5. The president will submit an annual report to the Minister of War, along with his statement

of accounts, showing: -

- A. The organization and extent of the medical preparations made by each society or sub-committee : -
 - (a) For duty with an army in the field.
 - (b) For work in fortresses.
 - (c) For work in open towns.

B. The number of medical men, pharmacists and male and female nurses at their disposal.

6. Members of the Committee of Direction are

appointed for three years.

7. The Committee of Direction will submit to the Minister of War the name of the proposed Delegate-General with the army; and sub-committees the names of delegates in each district.

8. These delegates must submit to the instructions of the C.-in-C. and other commanders in the field to whom they are attached, in all matters concerning the employment of voluntary

^{*} Act of 25th March, 1906, modifies Articles 4, 7 and 8 as follows:—
(1) An officer of the general staff of each fortress is ex officio a
member of the sub-committee of the locality.

⁽²⁾ The Committee of Direction will submit to the Minister for War for approval the names of the Delegate-General with the headquarters of an army and the Delegates with each division,

aid personnel, creation of mobile hospitals, evacuation of wounded, &c They will be

appointed by the King in peace time.

Art. 9. From the date of mobilization, the Red Cross Society and associated societies will conform to the regulations for the army medical service in the field.

., 10. The personnel will wear a uniform, as decreed by the King; and they are authorized to wear the Red Cross brassard; which, however, can only be handed to them by the D.M.S. of the field forces, and which must bear the stamp of G.O.C., and be numbered and registered. Each bearer of the brassard must carry a card photograph of himself with the stamp of the G.O.C. and registration number. The D.M.S. of a fortress acts as D.M.S. for the delivery of brassards, &c., to local voluntary aid personnel.

., 11. Foreign Red Cross Societies cannot give aid in Belgian wars except by special authority of the G.O.C. of the locality and under the direction of the Belgian Red Cross Society. They may

never aid in the first line.

,. 12. The society may give aid in calamities in peace... 13. The conditions under which aid may be given in other wars are determined by the Minister of War.

, 14. The statutes of the association may be withdrawn:—

(a) If the society refuses to give aid in war.
(b) If it employs its funds for other than

the objects for which it is formed.
(c) If in spite of the prohibition of the

(c) If in spite of the prohibition of the Minister of War, it uses its funds for aiding sick and wounded in other wars.

(d) If it refuses to comply with its statutes, or does not comply within two months with the written requirements of the Minister of War.

(e) If it compromises by its acts the neutrality

of Belgium.

APPENDIX I.

FIELD AMBULANCE OF A DIVISION.

		er- nel.	Н	orses	S.		Tot	al.
	Officers.	N.C.Os. and men.	1	and men. ga	Draught.	Wagons.	Men.	Horses.
Medical Service. Médecin de bataillon Médecin adjoint Médecins suppléants Pharmacien de 3 ^{me} classe Vétérinaire suppléant	1 1 1	 13 1	1 1 	 1			1 1 13 1 1	1
	1	 1 90 3 6 70					1 1 90 3 6 70	
Transport Service. 2nd Lieutenant	1	 1 1 3 4 1 1 1 1 28	2	 1 1 3 4 1 			1 1 3 4 1 1 28	2 1 3 4 1
Wagons. 4-wheeled ambulance wagons 2-wheeled ambulance wagons Pharmacy wagon Administration wagon Totals		224			24 18 4 4 	6 9 1 1	 229	24 18 4 4 65

APPENDIX II.

CAVALRY DIVISION FIELD AMBULANCE.

							Horses.				
			ne	Ri	ding	-					
		Officers.	N.C.Os. and men.	Officers.	N.C.Os.	Draught.	Wagons.	Men.	Horses.		
Medical Service.	-1								1		
Médecin de bataillon		1		1				1	1		
Médecin adjoint		1		1				1	1		
Médecins suppléants]		2					2			
Pharmacien de 3 ^{me} classe .		1		•••		• • •	•••	1			
Administrative Service.	1					1					
Officer	.	1						1	1		
Serjeant-Major or Serjeant .			1					1			
Corporals or soldiers		/	13					13			
Transport Service.	1										
2 nd Lieutenant		1		2				1	2		
Quartermaster-Serjeant .	.]		1		1			1	1		
Corporals			2		2			2	2		
Trumpeter			1	•••	1	• • •	•••	1	1		
Drivers $\dots \dots \dots$.	••	•••	14	•••	•••	•••	•••	14	•••		
Waqons.	ı						- 1				
4-wheeled ambulance wagon .						16	4		16		
Pharmacy wagon						4	1		4		
Administration wagon						4	1		4		
Totals	1	5	34	4	4	$\frac{-1}{24}$	6	20			
Totals		9	04	4	4	44	0	39	32		
	18	-	-	- 1		-	-	-			

APPENDIX III.

FIELD HOSPITAL.

			er-	E	Iorse	6	1	Tot	ol.
		SOI	nnel.	_	10186		100	dl.	
		Officers.	N.C.Os. and men.	Officers. H	N.C.Os. and men.	Draught.	Wagons.	Men.	Horses.
Medical Service. Médecin de régiment Médecin de bataillon Médecin adjoint Pharmaciens de 2 ^{me} ou 3 ^{me} classe Pharmaciens suppléants	 de 	1 1 1 2 		1 1 			•••	1 1 1 2 2	1 1
Administration Service. Officer Serjeant-Major or Serjeant Serjeant-Major (store-keeper) Cook Assistant Cook Corporals or soldiers		 	 1 1 1 1 20					1 1 1 1 1 20	
Transport Service. Serjeant-Major Corporal Drivers			1 1 10		1 1 			1 1 10	1 1
Wagons. 4-wheeled ambulance wagons Pharmacy wagons Administration wagons						8 8	1 2 2		4 8 8
Totals		6	38	2	2	20	5	44	24

APPENDIX IV.

VOCABULARY OF TERMS USED IN CONNECTION WITH THE BELGIAN ARMY MEDICAL SERVICE IN THE FIELD.

Belgian terms.

English equivalents.

Aliments.

Bataillon d'administration.

Brancardier. Bureau des hôpitaux.

Colonnes d'ambulance. Commission de gare.

Congé illimité.

Corps de santé militaire.
Corps des officiers du service de santé de l'armée.
Diète avec pain.
,, sans pain.
Garde Civique.
Hôpital de campagne.

,, special. ,, volant. Infirmier.

Infirmerie de campagne.

Inspecteur Général.

Médecin adjoint. Médecin auxiliare. Hospital diets.

Administration battalion (provides personnel for army services).

Stretcher-bearer.

Medical department of the War Office.

Field ambulances.

Committee formed at main railway stations to supervise the evacuation of wounded.

Permanent leave—really the reserve.

The medical corps.

Army medical officers corps.

Low diet, with bread.

Civil guard.

Temporary hospital for cases which cannot be evacuated. Hospital for infectious cases.

Field hospital.

Sick attendant.

Temporary hospital for slight cases.

Director-General of army medical services.

2nd lieutenant.

Medical student ranking as serjeant, enlisted in the battalion of administration.

English equivalents.

Belgian terms.

cal student ranking as poral, enlisted in the ttalion of administra-
eipal medical officer of
ortress.
eon-captain or surgeon- utenant.
eon-major or surgeon- otain.
O. of a hospital.
inistrative medical officer.
ctor of medical services
the field.
eon-colonel or surgeon- utenant-colonel.
eon on probation.
cal havresack.
er of the battalion of ministration.
er of the army service rps.
ian employed for special ties in hospital.
inistrative officials of the talion of administration.
utive personnel of the talion of administration.
macist-major.
macist on probation.
sing station.
ity disc.
mental aid-posts.
lations for army medical
vices in war.

Belgian terms.

English Equivalents.

Règlement sur le service des hôpitaux militaires. Sachet de pansement. Section de l'aumônerie.

Section des hôpitaux.

infirmeries Section des vétérinaires. Service de l'exploitation.

Service de la ligne de combat. Service de l'ordre

Service des soins.

Service des corps de troupe. Service des secours l'armée.

Soeur hospitalière. Vétérinaire suppléant Regulations for military hospitals.

First field dressing.

Religious section of the battalion of administration.

Medical section of the battalion of administration. Veterinary section of the bat-

talion of administration. Quartermaster's department in

hospital. Regimental medical service

in battle. Clerical section of a military

hospital. The personnel charged with

the care of patients in hospital. Regimental medical service. The medical, veterinary and

religious sections of the administration battalion. Nursing sister.

Probationary veterinary officer





